

REMARKS

Claims 14-20 and 31-43 are pending in the application. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

***35 U.S.C. § 102(e) Rejection***

Claims 14-17, 20, 33-36 and 39 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Patent Application No. 2004/0238871 to HERZUM et al.

The Examiner asserted that this document discloses or suggests all the features recited in these claims including the recited substrate contact. Applicants respectfully traverse this rejection.

Notwithstanding the Office Action assertions as to what HERZUM discloses, Applicants submit that HERZUM fails to disclose, or even suggest, for example, that little or no current flows through the substrate contact (claim 14) and a ring substrate contact formed within the substrate in electrical contact with the source (claim 33).

Regarding claim 14, Applicants do not dispute that HERZUM discloses that the substrate contact 12 is in electrical contact with the source 14 (see paragraph [0036]). However, HERZUM specifically explains, at paragraph [0036], that the current flows from the source to the contact 12. Thus, HERZUM cannot be read to disclose or suggest that little or no current flows through the substrate contact.

Regarding claim 33, as noted above, Applicants do not dispute that HERZUM discloses a substrate contact 12 is in electrical contact with the source 14 (see paragraph [0036]). However, HERZUM merely explains, at among other places paragraph [0036], that so-called contact 12 is a sinker12 and not a ring substrate

contact. Thus, HERZUM cannot be read to disclose or suggest a ring substrate contact formed within the substrate in electrical contact with the source. Indeed, the Examiner has failed to identify any language in HERZUM which can be read to disclose or suggest that the sinker 12 can be a ring substrate contact.

In support of the rejection of claim 14, the Examiner argues on pages 2 and 3 that HERZUM teaches that little or no current flows through the substrate contact because paragraph [0036] "explains that there is current flow through the substrate which supports the limitation 'little current flows through the substrate contact'". This assertion is simply unsupportable and clearly contrary to the express teachings of HERZUM which provides for a high conductivity connection. Indeed, Paragraph [0036] of HERZUM specifically explains the following:

[0036] A titanium silicon layer (TiSi layer) 52 is arranged on the surface of the substrate 10 so that it borders on the source 14 and the sinker 12 and at least partially covers the same. As the TiSi layer 52 comprises a high electric conductivity and preferably respectively covers a face as large as possible of the sinker 12 and the source 14, a current flows between the n+-doped source and the p+-doped sinker across the TiSi layer 52 which thus represents a silicide current bridge. A further TiSi layer 54 is arranged on the surface of the substrate 10 so that it borders on the drain 16. The gate 20 is arranged at the surface of the substrate 10 such that it opposes the body area 48 and is only separated from this area by the thin oxide layer 24. The gate 20 is a stack of the polysilicon layer 22 and a further TiSi layer 56 which comprises a lower thickness than the polysilicon layer 22 and is arranged on a side of the polysilicon layer 22 facing away from the substrate 10. (emphasis added)

Such a connection is hardly of the type which will provide that little or no current flows through the substrate contact and the Examiner has not demonstrated otherwise.

Thus, Applicants submit that the above-noted claims are not disclosed, or even suggested, by any proper reading of HERZUM.

Moreover, Applicants submit that dependent claims 15-17, 20, 34-36 and 39 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper reading of HERZUM discloses or even suggests, in combination, the features recited in claims 15-17, 20, 33-36 and 39 in combination with the features recited in claims 14 and 33.

Applicants request that the Examiner reconsider and withdraw the rejection of the above-noted claims under 35 U.S.C. § 102(e).

### ***35 U.S.C. § 103(a) Rejection***

Claims 18, 19, 31, 32 and 37-43 were rejected under 35 U.S.C. § 103(a) as unpatentable over HERZUM in view of U.S. Patent No. 4,738,936 to RICE.

The Examiner acknowledged that HERZUM lacks, among other features, the recited features of these claims. However, the Examiner asserted that such features are disclosed in RICE and that it would have been obvious to one of ordinary skill in the art to combine the teachings of these documents. Applicants respectfully disagree with the Examiner's assertions and traverses this rejection.

Notwithstanding the Office Action assertions as to each of HERZUM and RICE discloses or suggests, Applicants submit that neither HERZUM nor RICE discloses, or even suggests, for example, that little or no current flows through the substrate contact (claim 14), a ring substrate contact formed within the substrate in electrical contact with the source (claim 33), and a substrate contact formed within the substrate in electrical contact with the source, wherein the substrate contact is at least one of completely

encircling an active region, almost completely encircling an active region, encircling three-quarters of an active region, and encircling half of an active region (claim 42).

As explained above, Applicants do not dispute that HERZUM discloses that the substrate contact 12 is in electrical contact with the source 14 (see paragraph [0036]). However, HERZUM explains on paragraph [0036] that the current flows from the source to the contact 12. Thus, HERZUM can be read to disclose or suggest that little or no current flows through the substrate contact (claim 14). Furthermore, as HERZUM merely explains that so-called contact 12 is a sinker, the Examiner has failed to explain how the disclosed sinker can be read to disclose or suggest a ring substrate contact and/or a substrate contact that is at least one of completely encircling an active region, almost completely encircling an active region, encircling three-quarters of an active region, and encircling half of an active region.

RICE does not cure the above-noted deficiencies of HERZUM. Applicants do not dispute that RICE discloses an FET with a source contact (see title). However, the Examiner has failed to identify any language in RICE which discloses or suggests that little or no current flows through the substrate contact (claim 14). Furthermore, the Examiner has failed to explain how the disclosed source contact can be read to disclose or suggest a ring substrate contact (claim 33) and/or a substrate contact that is at least one of completely encircling an active region, almost completely encircling an active region, encircling three-quarters of an active region, and encircling half of an active region (claim 42).

Furthermore, Applicants direct the Examiner's attention to the guidelines identified in M.P.E.P section 2141 which state that

"[i]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

As this section clearly indicates,

"[o]bviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)."

Moreover, it has been legally established that

"[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) .... Although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.' 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references)."

Additionally, it has been held that

"[a] statement that modifications of the prior art to meet the claimed invention would have been well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levingood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)."

Applicants submit that there is no motivation to modify HERZUM and RICE in a manner which would render obvious Applicants' invention, and additionally, Applicants submit that there is no motivation or rationale disclosed or suggested in the prior art to modify the applied reference in the manner suggested by the Examiner. The

Examiner's opinion does not provide a proper basis for these features or for the motivation to modify this document in the manner suggested by the Examiner. Therefore, Applicants submit that the invention as recited in at least independent claims 14, 33 and 42 is not rendered obvious by any reasonable inspection and interpretation of the disclosure of the applied references.

Finally, Applicants submit that dependent claims 18, 19, 31, 32, 36-41 and 43 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that no proper combination of HERZUM and RICE discloses or even suggests, in combination, the features recited in claims 18, 19, 31 and 32 in combination with the features recited in claim 14. Applicants also submit that no proper combination of HERZUM and RICE discloses or even suggests, in combination, the features recited in claims 37-41 in combination with the features recited in claim 33. Finally, Applicants submit that no proper combination of HERZUM and RICE discloses or even suggests, in combination, the features recited in claim 43 in combination with the features recited in claim 42.

Applicant requests that the Examiner reconsider and withdraw the rejection of the above-noted claims under 35 U.S.C. § 103(a).

## CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to

issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 09-0458.

Respectfully submitted,  
Basanth JAGANNATHAN, *et al.*



Andrew M. Calderon  
Reg. No. 38,093

November 17, 2006  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
(703) 716-1191